Application Number [   ] [SEARCH]

IDS Flag Clearance for Application [09301749]

[IDS Information]

Content	Mailroom Date	Entry Number	IDS Review	Reviewer
M844	08-16-1999	8	☑	06-16-2001 20:05:20 EXPO-CONV
M844	08-16-2000	9	☑	06-16-2001 20:05:20 EXPO-CONV

[UPDATE]

9/301749

Refine Search

Your wildcard search against 10000 terms has yielded the results below.
Your result set for the last L# is incomplete.
The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.
Search Results -

Terms	Documents
L6 and ((first$ adj2 (process$ or control$)) same (second$ adj2 (process$ or control$)))	2

Database:

US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search:

L7

Refine Search

Recall Text ⬍   Clear   Interrupt

Search History

DATE: Monday, April 03, 2006   Printable Copy   Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR			
L7	L6 and ((first$ adj2 (process$ or control$)) same (second$ adj2 (process$ or control$)))	2	L7
L6	L5 and (cash$ near2 register$)	9	L6
L5	l2 or l3 or l4	21	L5
DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=OR			
L4	(5256863 | 5471669 | 4882675 | 5047614 | 5490060 | 5192854 | 4674041)! [PN]	7	L4
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=OR			
L3	('5884278'| 'US 5884278A')[ABPN1,NRPN,PN,TBAN,WKU]	2	L3

L2   ('5884278'| 'US 5884278A')[URPN]   12   L2
L1   5884278.pn.   2   L1

END OF SEARCH HISTORY

☐ [Generate Collection   ] [Print]

L7: Entry 2 of 2   File: USPT   Mar 16, 1999

US-PAT-NO: 5884278
DOCUMENT-IDENTIFIER: US 5884278 A

TITLE: Retail store and method employing multiple network interfaces at each cash register, and receiving signals from portable cards at each cash register

DATE-ISSUED: March 16, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Powell; Ken R.	Athens	GA	30604	

APPL-NO: 08/799688   [PALM]
DATE FILED: February 11, 1997

INT-CL-ISSUED: [06] G06 F 17/60

US-CL-ISSUED: 705/14; 235/375, 235/383
US-CL-CURRENT: 705/14; 235/375, 235/383

FIELD-OF-CLASSIFICATION-SEARCH: 705/14, 235/375, 235/383
See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

[Search Selected] [Search ALL] [Clear]

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4674041	June 1987	Lemon et al.	705/14
☐	4882675	November 1989	Nichtberger et al.	705/14
☐	5047614	September 1991	Bianco	235/385
☐	5192854	March 1993	Counts	235/375
☐	5256863	October 1993	Ferguson et al.	380/24
☐	5471669	November 1995	Lidman	235/383
☐	5490060	February 1996	Malec et al.	705/10

OTHER PUBLICATIONS

UPC Coupon Code Guidelines Manual, reprinted Oct. 1994, Uniform Code Council, Inc.,

Dayton, Ohio

ART-UNIT: 271

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Alvarez; Raquel

ATTY-AGENT-FIRM: Jackson; Jerome D.

ABSTRACT:

A computer network for a retail store. The computer network collects coupon
redemption information from a plurality of cash registers and periodically sends
the redemption information to a market research center, allowing the correlation of
coupon redemptions with customer demographic data. Each cash register includes a
special computer for coupon redemption compilation. The special computer interfaces
to conventional cash register computer hardware without requiring a substantial
change to cash register computer software.

11 Claims, 35 Drawing figures

☐ Generate Collection   Print

L7: Entry 1 of 2   File: USPT   Sep 24, 2002

US-PAT-NO: 6456980
DOCUMENT-IDENTIFIER: US 6456980 B1

TITLE: Transaction systems and methods sending product identification signals to
two processors in each register station

DATE-ISSUED: September 24, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Powell; Ken R.	Athens	GA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
SoftCard Systems, Inc.	Watkinsville	GA			02

APPL-NO: 09/198550   [PALM]
DATE FILED: November 23, 1998

PARENT-CASE:
This Application is a Continuation of application Ser. No. 08/799,688 now U.S. Pat.
No. 5,884,278 KEN R. POWELL filed Feb. 11, 1997 for RETAIL STORE AND METHOD
EMPLOYING MULTIPLE NETWORK INTERFACES AT EACH CASH REGISTER, AND RECEIVING SIGNALS
FROM PORTABLE CARDS AT EACH CASH REGISTER, the contents of which are hereby
incorporated by reference.

INT-CL-ISSUED: [07] G06 F 17/60

US-CL-ISSUED: 705/14; 705/1, 705/10, 705/16, 705/400, 235/375, 235/378, 235/383,
235/2, 700/231
US-CL-CURRENT: 705/14, 235/2, 235/375, 235/378, 235/383, 700/231, 705/1, 705/10,
705/16, 705/400

FIELD-OF-CLASSIFICATION-SEARCH: 705/14, 705/1, 705/10, 705/16, 705/30, 705/400,
235/375, 235/383, 700/231
See application file for complete search history.

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected   Search ALL   Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4674041	June 1987	Lemon et al.	705/14

☐	4882675	November 1989	Nichtberger et al.	705/14
☐	5047614	September 1991	Bianco	
☐	5192854	March 1993	Counts	235/375
☐	5256863	October 1993	Ferguson et al.	
☐	5471669	November 1995	Lidman	235/383
☐	5490060	February 1996	Malec et al.	
☐	5708782	January 1998	Larson et al.	
☐	5727153	March 1998	Powell	705/14
☐	5774868	June 1998	Cragun et al.	705/10
☐	5857175	January 1999	Day et al.	705/14
☐	5884278	March 1999	Powell	705/14
☐	5956694	September 1999	Powell	705/14
☐	6055509	April 2000	Powell	705/14

OTHER PUBLICATIONS

Cents-off coupons: A wave of the instant future?, Ats & crafts retailer, p 8, Jan. 1994.*
Peter Fajkowski, Method and apparatus for coupon management and redemption, PCT/WO US9719246, entire document, 1997.*
UPC Coupon Code Guidelines Manual, reprinted Oct. 1994, Uniform Code Council, Inc., Dayton, Ohio.

ART-UNIT: 2161

PRIMARY-EXAMINER: Voeltz; Emanuel Todd

ASSISTANT-EXAMINER: Alvarez; Raquel

ATTY-AGENT-FIRM: Jackson; Jerome D.

ABSTRACT:

A store system for a commercial system with multiple products. The store system includes multiple register stations. Each register station includes a bar code reader that generates a first signal identifying a product selected by a customer, a register computer, and a cable that transfers the first signal to the register computer. Each register station is associated with a respective second computer that sends a second signal to the register computer. A cable transfers the first signal to the second computer. The register computer includes logic that determines a total amount due from the customer, by receiving the first and second signals. In an exemplary embodiment, the second computer interfaces to a customer card that stores discount information.

36 Claims, 35 Drawing figures

<u>Previous Doc</u>   <u>Next Doc</u>   <u>Go to Doc#</u>

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  16:  Gale Group PROMT(R)_1990-2006/Apr 03
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 104:  AeroBase_1999-2006/Mar
 107:  Adis R&D Insight_1986-2006/Mar W3
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 122:  Harvard Business Review_1971-2006/Mar
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768: EIU Market Research_2006/Mar 28
770: Beverage Marketing Research_2003/Jun
773: EdgarPlus(TM)-Williams Act Filings_2006/Mar 30
774: EdgarPlus(TM)-Prospectuses_2006/Mar 30
775: EdgarPlus(TM)-Reg. Statements_2006/Mar 30
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778: EdgarPlus(TM)-10-K & 20-F Filings_2006/Mar 30
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788: (Myrtle Beach) The Sun News_1996-2006/Apr 02
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990: NewsRoom Current_Nov 1 -2006/Apr 02
992: NewsRoom 2004_Jan 1-2004/Dec 31
993: NewsRoom 2003
994: NewsRoom 2002
995: NewsRoom 2001

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>>>    started at PD=19850102 stopped at PD=19921224
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           137  CASH?(2W)REGISTER?
        183497  FIRST?
        181787  PROCESS?
        121690  SECOND?
        181787  PROCESS?
            80  FIRST?(2W)PROCESS?(S)SECOND?(2W)PROCESS?
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Fundamentals of Bar Code Information Theory

Theo Pavlidis
Jerome Swartz
Ynjiun P. Wang

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Abstract

To compare encoding and decoding schemes requires one to first look into information and coding theory. This article discusses problems and possible solutions in encoding information.

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Citation: Theo Pavlidis, Jerome Swartz, Ynjiun P. Wang, "Fundamentals of Bar Code Information Theory," *Computer*, vol. 23, no. 4, pp. 74-86, Apr., 1990.

POS Systems Buyer's Guide
URL: http://www.buyerzone.com/computers/pos/buyers_guide1.html

Introduction to POS systems

Few purchases can have as dramatic an effect on your retail or hospitality business as a point of sale (POS) system. The right POS system will give you a new level of control over your operations, increasing efficiency, boosting profits, and helping you fine-tune your business model. The wrong system, however, can be a waste of money and a source of ongoing frustration.

Switching from a traditional cash register to a computerized POS system can be difficult - there are many factors to consider and some pitfalls to avoid. However the return on investment and benefits to your business can really make it worth your time and effort.

In the most basic sense, a POS system is a glorified cash register. The most basic POS system consists of a computer, a cash drawer, receipt printer, a monitor, and an input device such as a keyboard or scanner. However, in addition to being more efficient than cash registers, POS systems can create detailed reports that can help you make more informed business decisions.

POS systems save money, provide productivity gains, and can cut down the amount of time you spend away from the primary focus of your business. This POS System Buyer's Guide will walk you through the process of evaluating and selecting a system and vendor.

Do you need a POS system?

As with any significant business purchase, buying a POS system should involve careful research into what the market has to offer - as well as what your own needs are.

A computerized POS system can provide significant returns if your retail or hospitality business has annual revenues of around $700,000 to $900,000. Below this level, an electronic cash register can probably meet your needs for considerably less money.

Some businesses choose to invest in a POS system before reaching those revenue levels. They may want a POS system simply for the reporting features, or they may see it as an investment that can boost efficiency starting on opening day. A POS system is rarely totally unnecessary - most often, the only question is how soon it can pay for itself.

Saving money, getting more control over your business, and being more productive - sounds like a pretty good combination, right? Here are some of the ways a modern point of sale system can help your business.

Save money

Eliminate shrinkage. A computerized point of sale system can drastically cut down on shrinkage, the inventory that disappears from your store or restaurant due to theft, wastage, and employee misuse. Because employees will know that inventory is being carefully tracked, internal shrinkage will dwindle.

- **Improve accuracy.** Whether you use barcode scanning or not, POS systems ensure that every item in your store or on your menu is sold for the correct price. Your staff will never mis-enter or guess prices again, and you can change prices with just one tweak in the computer.
- **Get better margins.** Detailed sales reports can help you focus on higher-margin items. By moving items within a retail location or promoting under-performing dishes in a restaurant setting, you can help boost sales of high-profit items.

Get more information

- **Know where you stand.** At any point of the day, a POS system can instantly tell you how many of a particular product have sold today (or last week, or last month), how much money you have in your cash drawer, and how much of that money is profit.
- **Better manage inventory.** Detailed sales reports make it much easier for you to keep the right stock on hand. Track your remaining inventory, spot sales trends, and use historical data to better forecast your needs. Often, the software can alert you to reorder when stocks run low. Many store owners who think they know exactly what trends affect them find a couple of surprises once they have this data.
- **Build a customer list.** Collect the names and addresses of your best customers as part of standard transactions. Then use the list for targeted advertising or incentive programs.

Increase productivity

- Reduce paperwork. POS systems can dramatically reduce the time you have to spend doing inventory, sales figures, and other repetitive but important paperwork. The savings here: time and peace of mind.
- More efficient transactions. In retail settings, barcode scanners and other POS features make checkout much, much faster. Restaurants will find their order process greatly streamlined as orders are relayed automatically to the kitchen from the dining room. In both cases, your customers get faster, more accurate service.

Keep in mind that realizing these benefits requires a commitment to utilizing the POS system capabilities to their fullest. Without appropriate training and ongoing analysis, even the most sophisticated POS system will be no more useful than a basic cash register.

Hospitality POS vs. retail POS

The POS market is divided into two segments with very different needs: retail operations and hospitality businesses like restaurants, bars, and hotels.

Retail
Of the two groups, retailers have simpler POS needs. Their transactions are completed all at once, and there is often less variation in the types of products they sell. Some POS features retailers may specifically want include the ability to support kits (e.g. 3 for $2 deals), returns and exchanges, and support for digital scales.

A potential complication in some retail environments is the need for a product matrix. Your POS system will need to support matrixes if you sell items that come in a variety of styles, like clothing or shoes. For example, matrixes let you create one inventory and price entry

for a particular sweater, but still track sales according to size and color.

Hospitality
Depending on the type of establishment, restaurants and other hospitality businesses have different requirements from POS systems. Efficiency is the key focus for casual restaurants. For retail-style restaurants like sub shops, POS systems that relay inputted orders cut down on time-per-transaction and reduce the errors that can happen when hastily-scrawled orders are passed back to the kitchen. For quick-service restaurants, POS systems are practically a requirement for living up to their name: orders taken on terminals in the front are automatically displayed on monitors in the food preparation area, ready to be quickly assembled and delivered to the customer.

For table-service restaurants and fine dining, POS requirements are somewhat different. They include the need to be able to create and store open checks, as parties order more over time, as well as track which server is responsible for which table. The efficiency gains from better management can be impressive. If a restaurant with 20 tables and an average check of $45 can increase turnover by one party per table, that is an extra $900 on a busy night.

Well-integrated hotel POS systems allow you to transfer meal charges from the dining room to guests' rooms with just a button or two. Hotel managers need to be aware that not all POS systems integrate with all property management software).

POS system basics

Computer The central component of a POS terminal is the computer than runs the application. Most resellers prefer to sell you a computer with the rest of the POS system, rather than having you supply your own - some even charge an extra fee if you supply the computer. The reason is that setup and ongoing support is much easier when the reseller is familiar with the hardware involved. Getting all the hardware from one source lets the reseller take responsibility for the entire system.

If you do want to buy the computers separately, make sure you coordinate the purchase with your reseller. If you get exact specifications from your POS reseller and follow them closely, you should be able to avoid most compatibility problems.

POS applications are not that demanding on the computer, so an average to low-end computer will usually get the job done. - a $500 to $800 computer should be enough to run a POS terminal. The computer does need to be upgradeable - some POS software requires newer operating systems, such as Windows XP - so do not try to re-use the old DOS-based machines you have lying around.

Power
Having "clean" electrical power is a POS system necessity that many businesses underestimate. When you set up multiple POS terminals, they are networked together the same way computer systems in offices are. Fluctuations in the electrical supply due to blenders, meat slicers, microwaves, and other mechanical devices plugged into the same electrical circuit can easily cause enough noise in the power supply to wreak havoc with POS computer systems.

There are two common solutions to the problem. Power filtering can eliminate troublesome spikes and noise before they get to your computer terminals. The more robust solution is to install a dedicated circuit with an isolated ground and use it only for your POS systems.

Power problems are one of the single biggest causes of problems in POS systems. Make sure your vendor analyzes your power situation and suggests appropriate safeguards.

Architecture choices
When choosing your POS system, you may want to look for a system whose software can run on any type of PC so you are not tied down to a particular vendor or platform. Some manufacturers use proprietary hardware, which gives you less flexibility to purchase upgrades and additional equipment from other sources. The primary advantage of proprietary systems is that the software is written specifically to work with one piece of hardware, ensuring seamless compatibility.

POS hardware - input devices

Keyboards and touch screens
One of the first choices you will have to make about your POS system hardware is whether to go with a touch screen or a programmable keyboard. Most businesses choose touch screens. The only market where keyboards are more popular is grocery stores, where the ability to program individual keys for specific item codes and prices is appreciated.

Touch screens are more intuitive to use than keyboards for many users. They also provide more flexibility in the user interface and programming. Most touch screens sold these days are based on flat-screen LCDs instead of traditional CRT monitors. While LCD touch screens are slightly more expensive (typically $600 - $1,000 instead of $400 - $500), they last longer, use less electricity, and take up less space. They also look much better. With both CRT and LCD displays, avoid "overlay" touch screens that are added on to regular monitors - they are more prone to breakdowns and add an unnecessary complication to your system.

When it comes to keyboards, some models are standard 101-key models that you find with any computer. Others are smaller, more POS-specific devices, such as the flat-panel membrane keyboards common in fast food outlets. Often, POS keyboards come with built-in magnetic stripe readers for processing credit cards. Programmable keyboards usually go for between $150 and $300.

No matter which you choose, make sure you consider the environment where it will be used. Both keyboards and touch screens are available with varying levels of spill- and dust-proofing.

Scanners
All scanners work in the same basic manner, reading a bar code and sending the resulting numbers back to the computer. They typically connect to the system through Y-connectors called wedges that make them function as an extension of the keyboard. Bar code scanning improves speed and accuracy during checkout.

Low-end scanners are based on charge-coupled device (CCD) technology. These scanners are inexpensive, but usually have a very short range - the item being scanned needs to be 1 to 3 inches from the scanner. In a typical retail setting, that should be fine.

Laser scanners, which use a beam of light to read bar codes, offer better scanning ability with the ability to scan at longer distances. Some laser scanners are "autosensing," meaning they turn themselves on when an item is placed in front of them, scan the code, and then turn off again. Omnidirectional scanners send out 15 or 20 lasers simultaneously, letting you scan a bar code from any angle. And the top of the line are embedded scanners, which are omnidirectional scanners that are installed below a counter, as is common in supermarkets.

Choose a scanner based on your customer volume. If you do not usually have more than a customer or two in line, CCDs or entry-level laser scanners should meet your needs. A fairly constant flow of customers might call for an autosensing model, and very high volume businesses should investigate omnidirectional or embedded scanners. Prices range from below $100 for the most basic CCD scanners to $350 or more for omnidirectional laser scanners.

Handheld terminals

The latest type of input device is the handheld, wireless terminal. Essentially a PDA, each handheld terminal wirelessly transmits orders back to a base station. A distinct advantage for restaurants is that they increase the amount of time servers spend on the floor taking orders and interacting with customers, because they never have to go back to a terminal to enter orders.

Newer still are write-on handhelds: instead of trying to compress a touch-screen interface onto a tiny PDA screen, these devices allow servers to simply write the orders down. Handwriting recognition software parses the order then sends it on to the kitchen and bar as needed.

Handheld terminals are understandably more expensive than traditional touch-screen order terminals. However they can make up for the cost by allowing your servers to spend more time upselling more desserts and drinks. If you are evaluating handheld terminals, make sure you ask about the "drop test" - units are rated for toughness according to how much of a fall they can survive.

POS Hardware - other peripherals

Printers

Every POS system needs a printer to create credit card slips and receipts for customers. Many restaurants also use printers to send orders to kitchen and bar staff. There are two main types of receipt printers: dot matrix and thermal.

Dot matrix printers, also known as impact printers, use pins and an ink ribbon to print on regular paper. Dot matrix printers are fairly inexpensive, usually $200 - $400. They are better suited for use in kitchens, where the ambient temperature can be enough to prevent thermal printers from working effectively.

Thermal printers use heat and special heat-sensitive paper to generate receipts. They are slightly more expensive, ranging from $300 to $500, but they are faster, quieter, and generally more reliable because they have fewer moving parts.

Over several years of use, the higher costs for thermal paper are just about balanced out by the need to buy both paper and ribbons for dot matrix printers.

Cash drawers

Cash drawers are... well, drawers you keep cash in, along with credit card slips, gift certificates, exchange receipts, and any other important paperwork. The most important thing to look for in a cash drawer is the sturdiness of its construction. They take a lot of abuse from constant opening and closing, and they also frequently serve as a shelf for a display or other heavy pieces of equipment. Look for eighteen gauge steel as a good benchmark minimum.

In most cash drawers, the signal to open the drawer comes from the receipt printer. If you purchase your entire system from one dealer, you will not have to worry about compatibility, but this can be a concern if you are purchasing components separately.

Some cash drawers are more easily serviceable than others. Although the life expectancy of a cash drawer is measured in the millions of cycles, make sure you can replace the rollers, bearings, and other parts if they do wear out before then. Cash drawer prices range from $150 to over $300.

Customer displays
Also known as pole displays, these accessories show item and price information to the customer. Some can show advertising as well. There is not much you need to know about displays - take a look to compare size and how the display looks. You do need to make sure that your software is compatible with the display's emulation, but again, if you buy an entire system from one dealer, this will not be a problem. Average pricing is around $200.

Magnetic stripe readers
Credit card processing is handled by the POS software so you do not need a separate credit card terminal. However, you do need a magnetic stripe reader to read the card itself. Often, keyboards and touch screens have readers built in; if your input device does not, you will need to purchase a standalone reader, which will set you back $75 - $150.

Check readers
Using magnetic ink character recognition (MICR), automatic check readers can quickly help you prevent fraud by verifying essential account information. Since personal checks are becoming a less and less popular method of payment, few retailers purchase them these days. However, if you see a significant volume of checks, a reader can be a real time saver. Make sure that your software supports check verification before purchasing one.

Fingerprint IDs
Security to limit employee access to POS terminals is critical. The two most common methods are simple PIN codes and magnetic swipe cards, but these are both subject to abuses: PIN codes can be read over someone's shoulder, and swipe cards can be forgotten by employees, stolen, or lost. A new add-on many POS systems now offer is a tiny fingerprint ID box - just big enough for a thumb, the pad ensures that the right employee is able to log on - and no one else will.

POS Software

The basic functionality of POS software does not vary much from one package to the next. However, as you add more features, the software becomes more complicated and costly.

Make sure you know what you need the software to do before comparing long lists of features. Draw up a list of the factors that make your business unique. What unusual purchasing programs do you have? Do you offer incentives that require very detailed or specific tracking? A good POS salesperson will ask you these types of questions to determine what software would be best for you - do yourself a favor and ask them of yourself beforehand.

Basic features
Most POS software supports a large number of common functions: displaying the items and prices in a sale, handling taxes, returns, voids, payment options including credit card processing, layaways, discounts, accounting reports, and inventory tracking. Restaurant POS software allows creation of checks by diner or table, special orders, tracking orders per server, moving diners from the bar to a table, waiting lists, and more. It is safe to assume that any standard customer transaction will be handled by all major POS software.

Capabilities for multiple locations
Some POS software offers an "Internet data board." This is essentially a snapshot of the day's business that you can access from anywhere with a web connection. For franchises or

other businesses with multiple locations, this can provide significant peace of mind. Other systems can be set to download daily totals to a central server.

For businesses with branches in different regions, "multimanagement" can be particularly useful. Multimanagement allows you to share some settings but vary others between sites - for example, offering the same menu but with different prices in different locations.

Frequent diner programs
POS systems can make frequent diner programs available to small restaurants, which until now have primarily been in the domain of large chains. These programs, which reward return visitors with incentives or discounts, are rapidly growing in popularity. Examples include point systems that work much like frequent flyer miles - each item on the menu has a point value associated with it. Diners accumulate points that can be later exchanged for a free desert, half price special, or dollars off their meal. By assigning higher point values, you can give a boost to high-profit or low-performing items. You can also market to customers based on their typical purchase or time of visit.

Questions to ask about POS software

- Does it interface with my accounting software? How extensive is that integration - does it simply an export of journal entries for the day, or is there a thorough integration of the two programs?
- How easy is it to make changes to the programming? You will need to be able to change prices, items, and employees regularly - make sure you can comfortably work with the setup interface.
- Does the credit card processing feature work with my current merchant account?
- What type of reports is it capable of producing? Every piece of software will give you basic reports - ask for samples so you can compare.
- Does it support gift card transactions? How thoroughly - can cardholders check their balances online?
- Can you make changes in advance? For example, can you create a Christmas menu sometime in October, and set it to automatically take effect December 1?
- Does it interface with liquor control devices? (LCDs track each pour of a bottle, reducing shrinkage and free drinks.)

POS Pricing and how to buy

Most POS systems are sold through resellers, not manufacturers. These resellers have the expertise to install, program, and support your POS system. Other vendors sell complete systems over the Internet or the phone - they tend to specialize in less-expensive, one-size-fits-all solutions that are ready to go as soon as you plug them in.

Costs for POS systems can vary significantly. A full-blown POS system, installed and customized to your business, can range from $2,500 to $6,000 per terminal, including hardware, software, and support. You can purchase a complete off-the-shelf system from a discount vendor for much less - as low as $1,500 - but you will have to install and program it yourself, and will not have the support you probably need.

Price should not be your most important consideration when comparing POS vendors. The system will pay for itself in time through reduced expenses and increased sales, so you should be making sure you get a system that truly meets all your needs. It is particularly important that you have confidence in the vendor you choose. (See choosing a vendor for more.)

Almost all POS systems are sold outright; very few are leased. POS vendors often have

arrangements with third-party leasing agencies if you are interested in spreading the costs out over time; you can also simply get a small bank loan to purchase the complete system.

Upgrading POS systems as your business grows is not only easy - it is almost expected. Regular software updates let you get access to the latest features. Upgrades may be included in your service contract, or may involve a small additional fee. Adding new hardware - entire new terminals, or new peripherals for existing terminals - is also generally easy, provided the hardware you add is compatible with your software. Buying "more of the same" is a good way to make sure everything connects smoothly.

POS Service and support

Consider what happens if your POS system goes down. Chaos? Closed doors? A blizzard of hastily-scrawled receipts? While it does not happen often - most reputable POS systems have very good overall reliability - shutdowns can lead to unhappy customers, lost revenue, and considerable headaches. The support policies of a POS vendor can easily determine whether you should do business with them or not.

You should get an in-depth explanation of how your potential vendors handle support. Most will diagnose problems over the phone first -- many basic problems can be solved this way. Some vendors have telephone support available 24 x 7, while others are available only during business hours. Restaurants should lean towards vendors who do have 24 x 7 support, since their busiest times tend to be outside normal business hours.

For problems that can not be solved over the phone, there are different options for escalation. Local vendors usually have field service technicians who can come to your location and make repairs. If they can not fix the problem on site, they should be able to provide loaner equipment that can keep your business running. Usually you can get a guarantee that site repairs will happen with 24 hours.

Some vendors do not have field technicians - they may not even have an office in your state. Often, they will set up direct Internet access to your system, so they can dial in and make changes remotely. Others will send you a replacement component as soon as you call in with a problem, then have you send the broken component to them for repair. If you have many terminals, this is probably fine - you will get your new parts within a day or two. For smaller business with only a few terminals, losing one for two days may not be an option.

Vendors provide widely varying guarantees. Some provide parts and labor for one year; others include free phone support for that first year, as well. Many charge per-incident for calls outside of business hours. Some charge for annual support contracts, and prices range from a cheap $200 to over $1000 per year. In short, there is not much consistency in how vendors structure their support plans. This can make it hard to compare one to the next, but make sure you do: POS systems are too critical to day-to-day business to risk underbuying support.

Choosing a POS vendor

Because of the critical nature of a POS system, choosing a vendor is a big decision - bigger in many ways than the actual hardware and software choices. Price is an issue, but in many cases you get what you pay for, so it is worth doing your research before committing to a vendor. Here are some ways to make sure that your vendor is dedicated to and capable of supporting your business through any problems you might have.

Support

As discussed here, customer support is critical to the success of a POS installation. Make sure you know exactly what your vendor provides in terms of response times, replacement policies, and telephone support. This is the single most important aspect of a POS purchasing decision.

Installation
The quality of a POS installation can have lasting effects on your business. Qualified installers will not take a standardized approach to installation: they will analyze your needs, test your existing infrastructure, including power lines, and make sure you get a system that is customized to your location and business needs. The first week or two of using a POS system will determine whether it flies or flops, so a well-tested installation is essential. Ask how often the vendor will be on site during and after your launch - only until the system is running, or will they come back to check in and answer the inevitable questions that arise?

Experience
As with any major business purchase, potential vendors' experience in the industry is also important. However with POS systems you can go one step further: investigate how much experience the vendor has in supplying systems to other companies in your line of business. Dry cleaners have different needs than liquor stores, and a self-service cafeteria varies considerably from a sit-down sushi restaurant. Good POS salespeople will ask you about your business, find out what your particular needs are, then provide a solution that is appropriate for you.

Facilities
Visiting vendors' facilities can be a great way to get a sense of their operation. You will be able to check out their repair shop and get a sense of how busy they are. You may want to ask for an organizational chart or a tour of their help desk. Depending on your support needs, proximity may or may not be important to you - if you plan to rely on telephone support and shipping components back for repair, it will not matter, but if you expect field technicians to come to you, distance from the vendor can be a factor.

Demonstrations
Nothing will give you a better sense of how easy a system is to use than trying it yourself. Some vendors do on-site demos, which gives you the added advantage of being able to see how the hardware looks in your location. Others will invite you to try the system in their office, which gives you that facilities tour we discussed. Either way, an in-person demo is strongly recommended if you are unfamiliar with POS systems.

References
Another familiar way to investigate suppliers for your business is to ask for references to other customers - make sure to ask for references that are in business similar to yours. Of course, you will be referred to the vendor's most satisfied customers, but you can still learn quite a bit from them. Here are some sample questions to ask the references:

- How has the POS system influenced your business?
- What do you wish you had done differently?
- Have you needed any support or repairs? How did the vendor respond?
- Do you know of any one else who uses this system? This can get you additional references to speak to, some of whom might be more candid.
- If you had to say one negative thing about the system/dealer, what would it be?

Do not be afraid to ask for a reference that dislikes the dealer, as well. Every business has dissatisfied customers from time to time, and you can certainly learn from them.

Return policies Most manufacturers offers warranties that will enable you to get repairs or replacements for any equipment failures, but returning equipment is more difficult. Many vendors charge hefty restocking fees, $500 and up, for returns on complete systems; some vendors may allow you to exchange individual pieces of hardware for others, but some may not accept returns at all. Again, make sure you understand these policies before you sign a contract.

Buying tips

- Make sure you think through all of your special discounts and promotions before making a purchase. Those unusual programs can be difficult to accommodate in some software, so make sure you do the research.
- As with any computer systems, backups are important. Talk to your vendor about creating automated backup schedules.
- Do not use your POS computers for anything other than POS. Especially resist the temptation to connect them to the Internet and use them for web browsing or email.
- Preventative maintenance can be important. Simply vacuuming out the cases and lubing and cleaning printers can extend their lives considerably.
- If you have a little bit of computer ability and think you might be able to put a POS system together yourself... that is probably a very bad idea. POS systems have to be much more robust than regular systems, and the issues that can crop up are very specific to POS.
- Most major POS software publishers provide some sort of demo on their web sites - many even provide a full working version of the software either as a download or on CD. Using the software on your own can help you evaluate the ease of use and judge how stable and/or buggy the software is.

Related Terms Cash Register, Point of Sale Equipment, Point of Sale Software, POS Cash Registers, POS Dealer, POS Hardware, Restaurant POS System, Retail POS Systems, Wireless POS

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